

# How to Update TPM Firmware

## Applications

The TPM firmware update are only applicable to the following models.


Product Name	CPU Generation	TPM FW Version	BIOS version or later
A140	10th Gen	7.2.1.0	R1.11.070520
B300	8th Gen	7.2.0.1 / 7.2.0.2	R1.09.070520
B360	10th Gen	7.2.1.0	R1.26.070520
F110	8th Gen	7.2.0.1 / 7.2.0.2	R1.00.070520
K120	8th Gen	7.2.0.1 / 7.2.0.2	R1.07.070520
S410	8th Gen	7.2.0.1 / 7.2.0.2	R1.00.070520
UX10	8th Gen	7.2.0.1 / 7.2.0.2	R1.00.070520
UX10	10th Gen	7.2.1.0	R1.15.070520
V110	8th Gen	7.2.0.1 / 7.2.0.2	R1.00.070520
V110	10th Gen	7.2.1.0	R1.10.070520
RX10	7th Gen	7.2.0.1 / 7.2.0.2	R1.09.070520

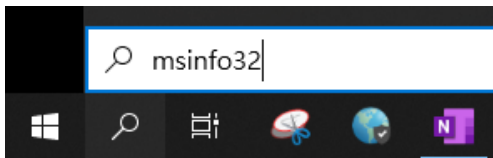
# Update Procedures

Please ensure below initial conditions are all set before starting TPM firmware update:

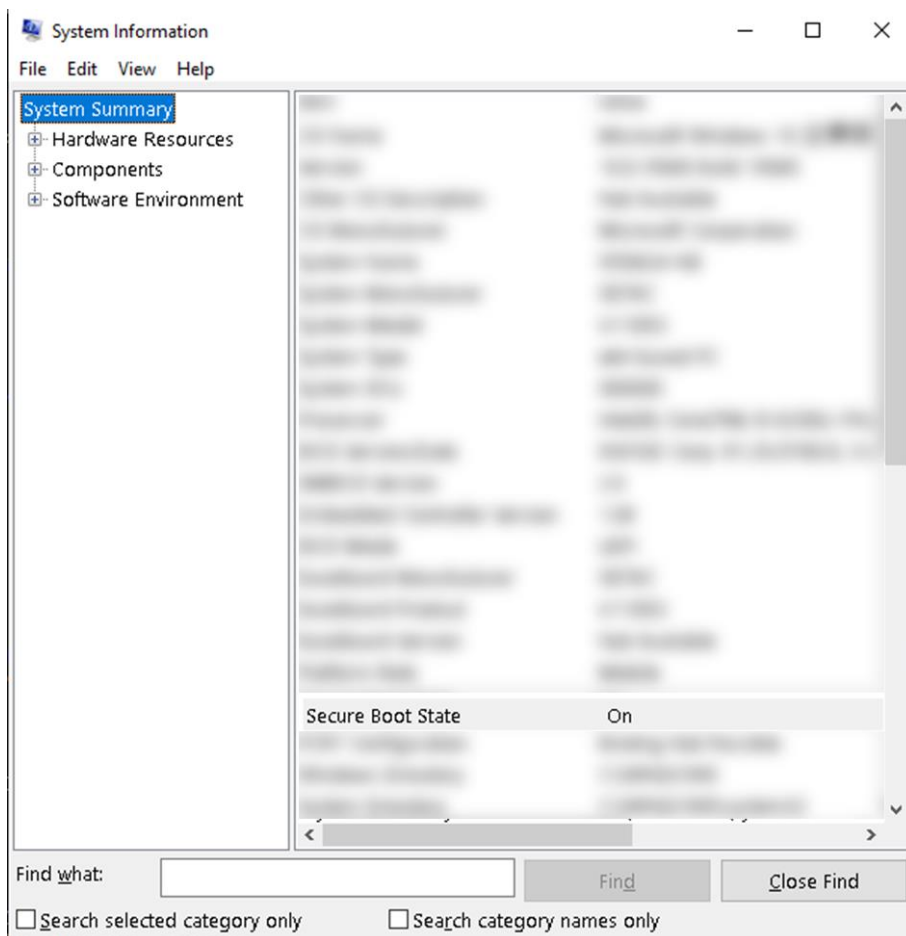
- Connect device with AC adapter and with **at least 30%** battery power
- Ensure that **Secure Boot** state is on/enable
- Disable **BitLocker** function

## Check Secure Boot State

1.Type “msinfo32” in the search bar near windows start icon  and enter to initiate the “System Information”.



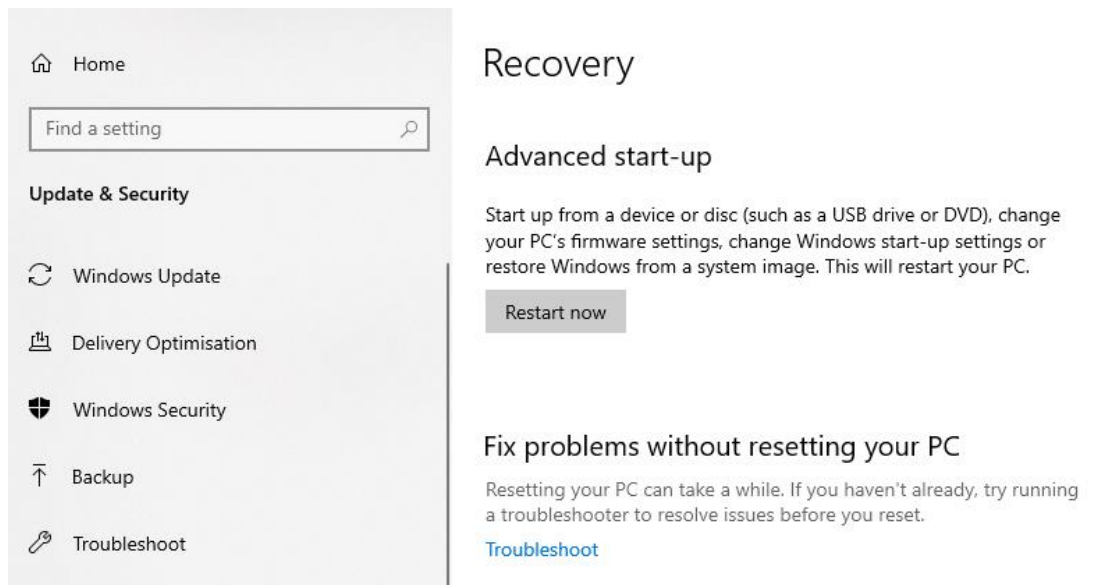
2. Look into “system Summary” and find the information of “Secure Boot State” and make sure it is on.



3. If the state is NOT “On”, then check the instruction below the enable the secure boot.

## Enable Secure Boot

1. In Windows 10 OS: Settings→ Update & Security→ Recovery→ Advanced start-up.  
In Windows 11 OS: Settings→ System → Recovery→ Advanced start-up.



2. Click “Restart now”, then system would show a screen of options.
3. Choose “Troubleshoot” → “Advanced options” → “UEFI Firmware Settings”.
4. System would request to confirm the options “Restart to change UEFI firmware settings”, click “Restart” to continue the actions.
5. System would show the pre-boot menu, please go to “Setup Utility” → Tab “Security” → enter “Set Supervisor Password” → set passwords → confirm OK on the pop-up dialog “Changes have been saved after press “Save and Exit”.”
6. Option “Secure Boot Configuration” appears on the Tab “Security” after last move.
7. Enter “Secure Boot Configuration” → Select “Secure Boot” → Select “Enable”.
8. The Secure Boot state has been changed to enable after saving the change.

## Disable BitLocker Function

**Warning:** TPM firmware update will cause loss of all TPM keys and data protected by those keys. It is important to disable BitLocker before applying the update.

1. Disable **BitLocker** on Windows OS. Select **Control Panel** → **System and Security** → **BitLocker Drive Encryption**. Click **Turn off BitLocker**. (Picture 1)



Picture 1

2. Click **Turn off BitLocker** (Picture 2) to confirm decryption drivers



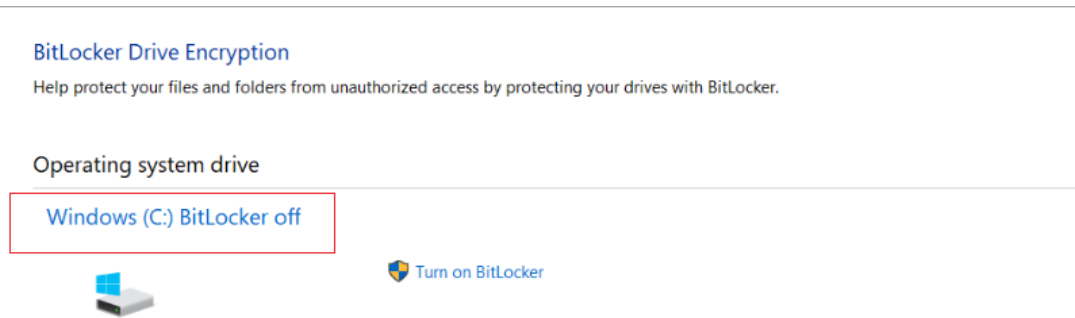
Picture 2

3. Wait for decryption process to finish (Picture 3)



**Picture 3**

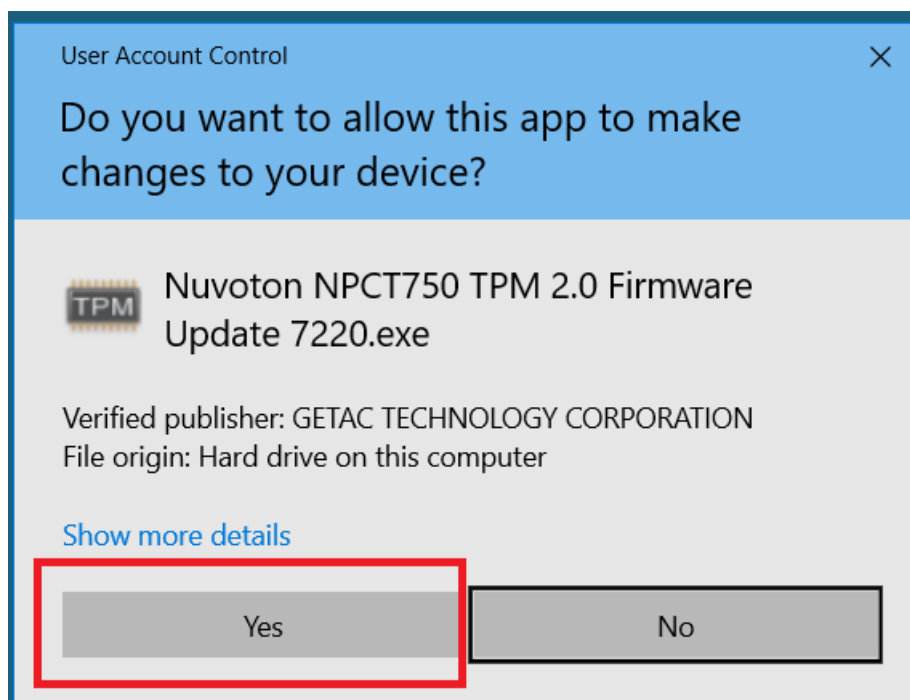
4. Bitlocker function is successfully disabled when the window shows BitLocker is off (Picture 4)



**Picture 4**

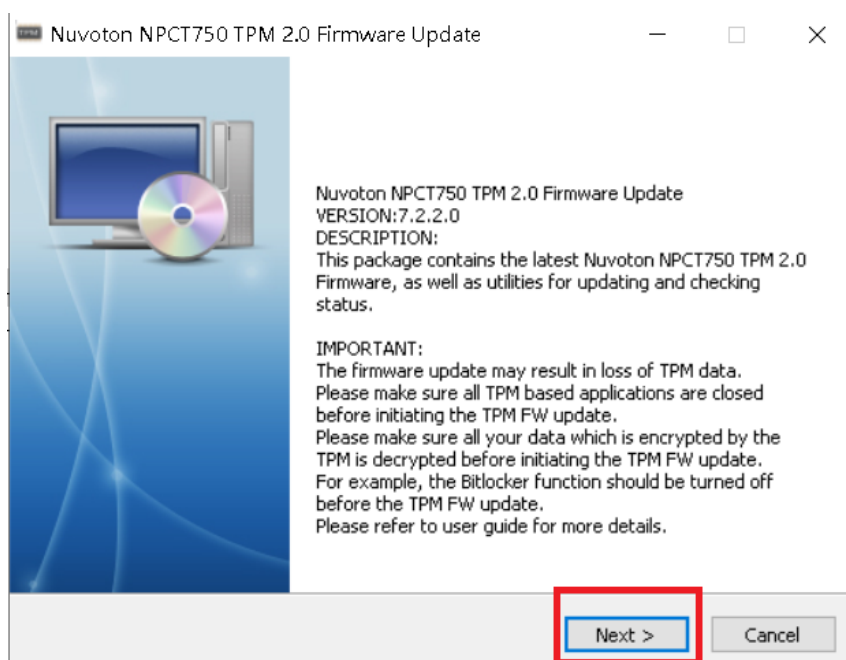
## Update TPM Firmware

1. Double click “**Nuvoton NPCT750 TPM 2.0 Firmware Update 7220.exe**” to run the file
2. Click **yes button** to approve the administrator privileges for updating TPM firmware (Picture 5)



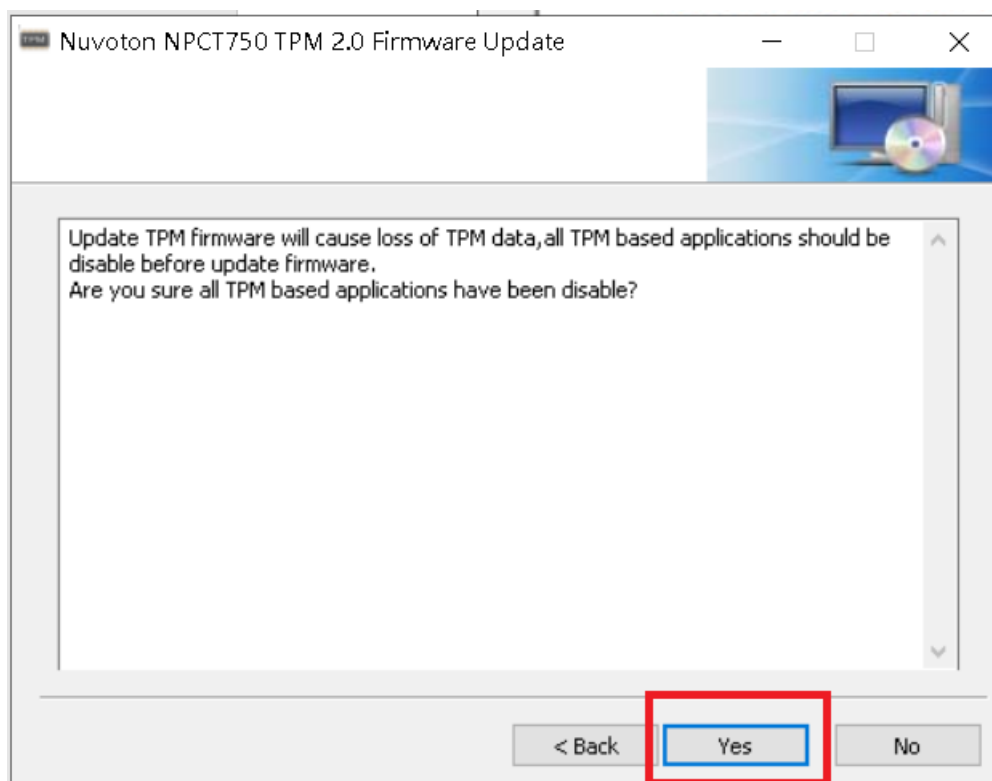
**Picture 5**

3. Click **Next button** (Picture 6)



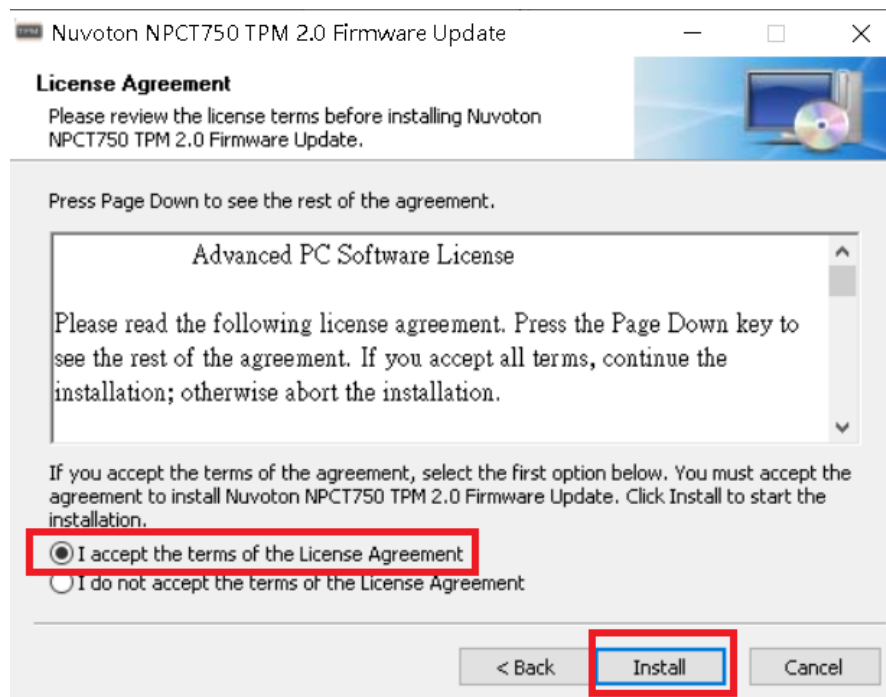
**Picture 6**

4. Click **Yes** button (Picture 7)



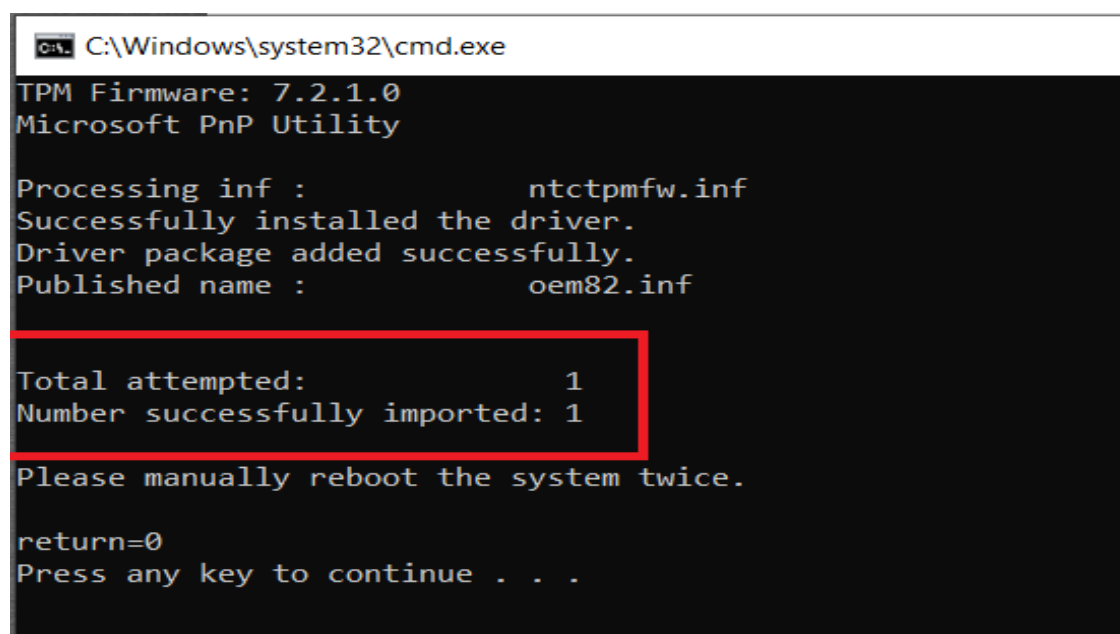
**Picture 7**

5. Choose **I accept the terms of the license agreement**, and click **install** (Picture 8)



**Picture 8**

6. After TPM firmware update driver install successfully, the screen will show as Picture 9



```
C:\Windows\system32\cmd.exe
TPM Firmware: 7.2.1.0
Microsoft PnP Utility

Processing inf :          ntctpmfw.inf
Successfully installed the driver.
Driver package added successfully.
Published name :          oem82.inf

Total attempted:          1
Number successfully imported: 1

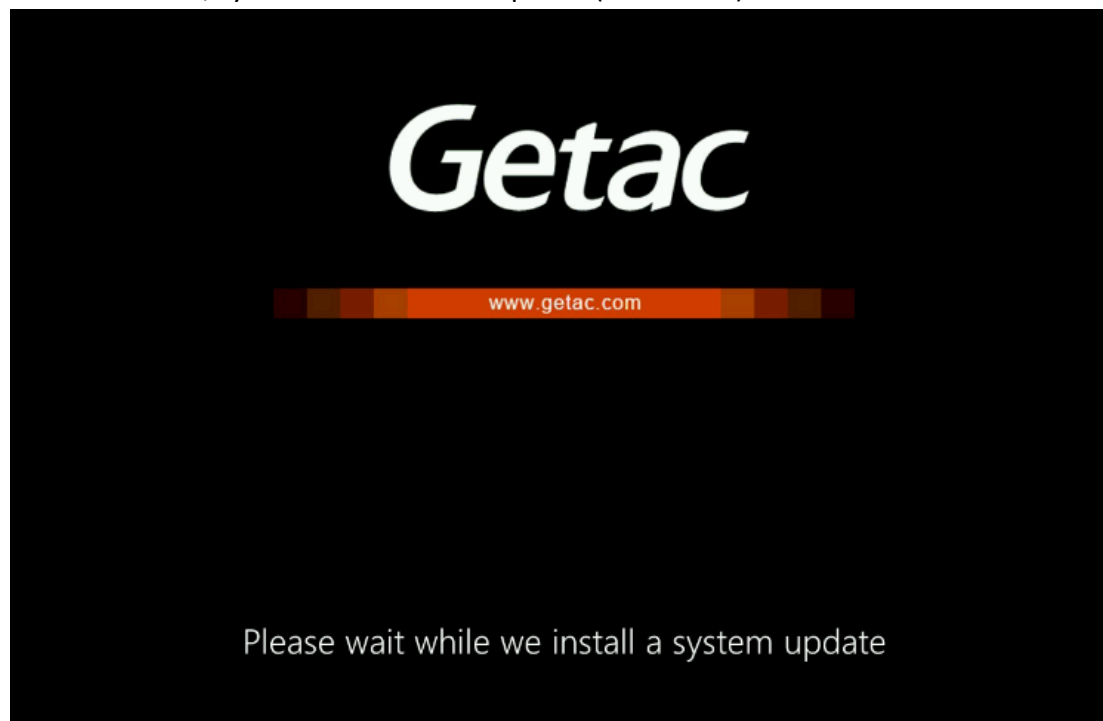
Please manually reboot the system twice.

return=0
Press any key to continue . . .
```

Picture 9

7. Please **manually reboot the system** as the screen instructs after successfully update firmware

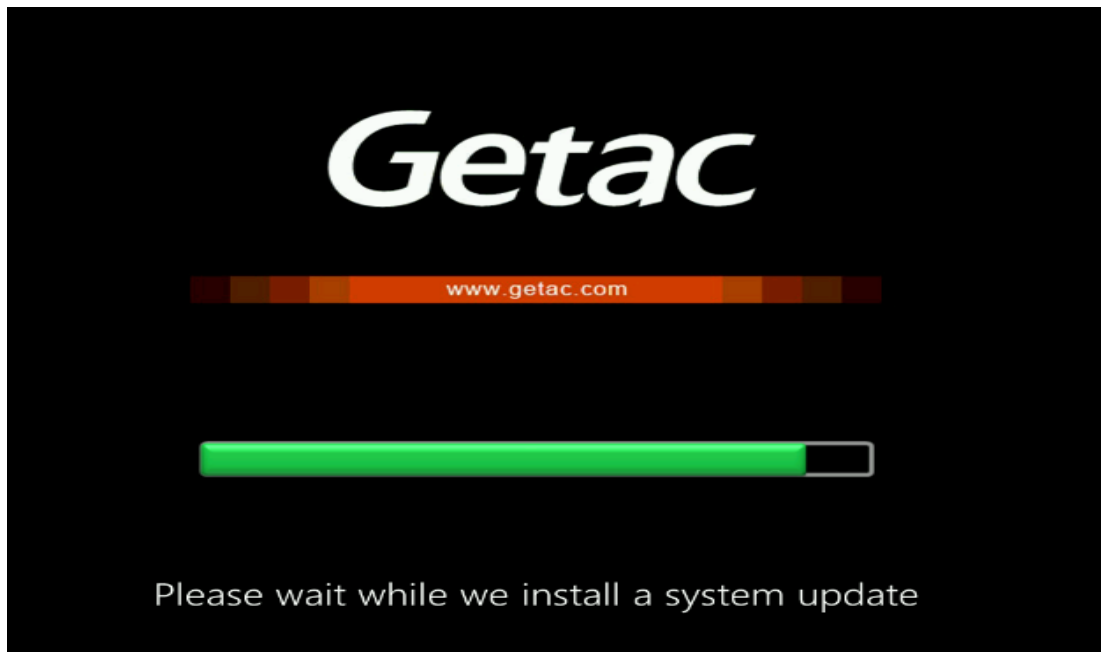
8. After reboot, system will install an update (Picture 10)



Picture 10



9. After 1<sup>st</sup> update, system will automatically reboot and install the TPM firmware process with progress bar (Picture 11)



Picture 11

10. System will automatically reboot to Windows after progress bar is complete

11. The system does not detect the TPM module at this moment, **please manually reboot the system**

12. After the system reboot and enter Windows, the process of TPM firmware update is complete.

13. TPM based applications (including BitLocker) can be enable after Firmware update.